CITY OF MORGAN HILL **SEPTEMBER, 1995**

SENIOR ENGINEERING AIDE

DEFINITION:

Under general supervision, provides training and lead direction to a small staff of Engineering Aides; performs varied sub-professional engineering-related technical support duties; performs related work as required. Assists engineers in reviewing site plans, parcel and subdivision maps, developing plans, specifications and estimates for projects and related duties.

CLASS CHARACTERISTICS:

Incumbents perform a variety of journey-level sub-professional engineering duties, both in the office and the field. This class is distinguished from Engineering Aide in that it provides limited training and lead direction to Engineering Aides in addition to performing the more complex assignments of the class series.

IMPORTANT AND ESSENTIAL JOB FUNCTIONS:

1. Provide limited direction to and instruct a small staff of Engineering Aides.
2. Assist professional engineering staff in a variety of inspection, survey, drafting, research and operational activities.
3. Inspect the work of Aides performing normal surveying tasks; record measurements.
4. Reduce survey notes and may do simple design work.
5. Answer questions from the public at a counter or on the telephone.
6. Maintain records and prepare reports following an established format.
7. Conduct studies relating to engineering matters, analyzing data and making recommendations.
8. Conduct title searches and reads and interpret property descriptions.

Senior Engineering Aide

MARGINAL/PERIPHERAL JOB FUNCTIONS:

1. Perform varied general support tasks such as make copies of drawings, filing and retrieving materials, and distribute maps, specifications and other documents.

2. Post information to maps or drawings and mail maps or layouts as directed.

3. Assist with traffic engineering surveys by setting counters and taking manual counts.

4. Prepare charts and/or graphs for reports for presentations.

5. Perform related work as required.

QUALIFICATIONS:
Knowledge of:

1. Civil engineering, land surveying, and drafting terminology, principles and procedures.

2. Mathematics including algebra, geometry and trigonometry.

3. Supervisory skills, principles, and practices.

4. The legal principles of the California Civil Code Map Act and applicable sub-divisions.

5. City municipal codes and City standards of construction.

6. Reviewing maps and plans.

Skill in:

1. Making accurate engineering-related calculations.

2. Keeping accurate and concise notes and records.

3. Operating survey instruments and reducing survey notes.

4. Coordinating various activities successfully, conducting studies, analyzing data, making recommendations and preparing reports.

5. Tracking and calculating project fees.

Senior Engineering Aide

Ability to:

1. Post information to and prepare maps and drawings.

2. Understand and follow oral and written directions.

3. Provide clear, concise written and oral instructions.

4. Establish and maintain effective working relationships with those contacted in the course of the work.

5. Coordinate several activities simultaneously.

JOB REQUIREMENTS:

1. Two years college or greater with emphasis in engineering, drafting, and math.

2. Two years of sub-professional engineering work equivalent to that performed by the class of Engineering Aide II.

3. Possession of a valid California Class C driver's license in compliance with adopted City driving standards.

4. Must be willing to work out of doors in various weather conditions.

5. Must possess sufficient strength to carry forty pounds of equipment and walk over rough terrain.

OTHER QUALIFICATIONS:

1. Public sector and supervisory experience desired.

MACHINES/TOOLS/EQUIPMENT UTILIZED:

1. Automobile
2. Reports, forms, pencils and pens
3. Maps, plans, and blueprints
4. Computer monitor, keyboard and printer
5. Copy machines
6. Fax machines
7. Calculator
8. Telephone

Senior Engineering Aide

MACHINES/TOOLS/EQUIPMENT UTILIZED (continued):

9. Drafting tools and aids

PHYSICAL DEMANDS:

1. Mobility
2. Speaking/Hearing
3. Driving
4. Seeing
5. Sitting
6. Manual dexterity
7. Lifting and carrying an average of 10 lbs.

ENVIRONMENTAL AND ATMOSPHERIC CONDITIONS:

Office Conditions:

1. Indoors: normal office conditions, 95% of the time
   Travel: varying conditions, 5% of the time
2. Noise level: conducive to office setting
3. Lighting: conducive to office setting
4. Flooring: low level carpeting
5. Ventilation: provided by central air conditioning
6. Dust: normal, indoor levels

Field Conditions:

1. Outdoors: varying weather conditions
2. Noise level: varying low to high equipment noise
3. Flooring: grass, dirt, rock, asphalt, weeds, rubbish, etc.
4. Dust: normal outdoor, to high outdoor levels
5. Hazards: surveying, directing, and inspecting work at sites in various stages of construction and development